



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,272	07/15/2005	Masayuki Kawai	052530	2718

38834 7590 09/19/2006

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

WU, SHEAN CHIU

ART UNIT PAPER NUMBER

1756

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/542,272

Applicant(s)

KAWAI ET AL.

Examiner

Shean C. Wu

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/15, 10/14 & 10/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2 and 4-18 are rejected under 35 U.S.C. 102(b)/(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 2003/062,873, JP 2003-287,622 or equivalent US 2005/0,122,586).

The reference (US '586) discloses an optical compensation plate used in the polarizing plate, liquid crystal panel and image display apparatus thereof. The reference optical compensation plate having an optical compensation layer comprises an anti-cracking layer contains a moisture-curing adhesive agent of isocyanate-resin applied onto

at least one surface of the optical compensation layer. The optical compensation layer preferably is a layer having a cholesteric structure, and the constituent material thereof is preferably a non-liquid crystal polymer formed by polymerizing aligned liquid crystal monomers or an aligned liquid crystal polymer (see abstract).

The reference further discloses the micro-hardness of the anti-cracking layer is 0.2 GPa and the thickness of layer is 5 μm (see sections [0142] and [0144]). Also, the helical pitch in the cholesteric layer ranges from 0.01 μm to 0.25 μm (see claim 10). In section [0098], the reference teaches that the polarizing plate includes a polarizer, a transparent protective layer and the optical compensation plate, and the polarizer and the optical compensation plate are laminated together via the transparent protective layer. In section [0105], the reference teaches that the material of the pressure-sensitive adhesive layer can be used such as an acrylic resin-based pressure-sensitive adhesive, a rubber-based pressure-sensitive adhesive and a vinyl-based pressure-sensitive adhesive. Also, see the reference claims 12, 15-16, 19-20 and 22-23. The reference claim 18 discloses a liner is further disposed on the surface of the pressure-sensitive adhesive layer. The reference claim 21 discloses an image display apparatus, which is selected from the group consisting of an electroluminescence (EL) display, a plasma display (PD) and a field emission display (FED), comprising the reference optical compensation plate. Therefore, the reference inherently anticipates the claimed invention.

If not anticipated because the reference does not disclose the anti-cracking layer having a glass transition temperature less than 100⁰ C (or 60⁰ C) in a cured state, it would be obvious to those skilled in the art to expect the anti-cracking layer comprising

Art Unit: 1756

isocyanate-based of the reference examples (examples 1 and 2) having the similar glass transition as the present claims. See Table 1.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as obvious over WO 2003/062,873, JP 2003-287,622 or equivalent US 2005/0,122,586 in view of JP 09-080,204.


The primary reference teachings have been previously set forth in section 3 above. The reference differs from the claims in that the claims have an anti-cracking layer having a glass transition temperature less than 100°C (or 60°C) in a cured state. JP '204 teaches the anti-cracking layer including a hexanmethylenediisocyanate compound having glass transition temperature $\geq 20^{\circ}\text{C}$ in a cured state (see section [0059]). Therefore, it would have been obvious to those skilled in the art to selected isocyanate-based including hexanmethylenediisocyanate (HMDI) having glass transition temperature less than 100°C (or 60°C) in a cured state to arrive at the claimed invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shean C. Wu whose telephone number is 571-272-1393. The examiner can normally be reached on 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1756

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Shean C Wu
Primary Examiner
Art Unit 1756

SCW